

# River Mile 10.9 Removal Action Community Health & Safety Plan, Lower Passaic River Study Area

Prepared for

Cooperating Parties Group, Newark, New Jersey

July 31, 2013

# CH2MHILL®

One South Main Street Suite 1100 Dayton, OH 45402

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# 1 INTRODUCTION

The River Mile (RM) 10.9 Removal Area (Removal Area) is an approximately 5.6-acre area located on the eastern side of the Lower Passaic River (LPR) within the Lower Passaic River Study Areas (LPRSA) at RM 10.9 and is in the river adjacent to the Bergen County Riverside Park, Municipal Recreation Area and the Passaic River Coalition Greenway in Lyndhurst, Bergen County.

The Lower Passaic River Cooperating Parties Group (CPG) has agreed to perform all actions necessary to remove, treat, and properly dispose of approximately 20,000 cubic yards (cy) of sediment from the Removal Area as well construct an engineered cap over the Removal Area (Removal Action). The surface sediment in the Removal Area contains elevated concentrations of dioxins and furans, PCBs, PAHs, mercury, and other chemicals and there is potential access to this sediment from the neighboring park and recreational boating.

This Community Health and Safety Plan (CHASP) describes the elements of the project and the measures being taken to identify and manage potential health and safety concerns within and adjacent to the local communities in the LPRSA and the NJ Harbor area. It also provides information relative to communication protocols prior to, during and after the implementation of the Removal Action. The Removal Action includes the following scope elements:

#### Inside this document:

**How it works –** summary of the RM10.9 Removal Action project and schedule

**Hazard assessment** – identification of projectrelated potential hazards that could affect the local community

**Quality of life considerations** – measures to address noise, light, odor, traffic, and use of the river for navigation

**Monitoring program –** activities to track and document project effectiveness

**Public participation** – activities to engage and inform the community

Emergency preparedness – planning and procedures in place just in case

For your reference – contact lists, maps, and other helpful resources

- Mechanically dredge the sediment (to a depth of 2 ft below existing grade)
- Transport the sediment via barge to an existing permitted treatment facility located in the NJ Harbor Area
- Treat the sediment by stabilization at the facility
- Contain, treat and dispose of excess barge water at an appropriately approved out-of-state facility
- Construct an engineered cap over the remaining sediment within the Removal Area
- Transport the stabilized sediments to an out-of-state disposal facility for disposal

The following guiding principles will direct the work and activities of the CPG and its contractors during the Removal Action:

- Coordinate and communicate with the public to ensure on-water activities are conducted safely and to minimize interference and inconveniences with the local communities and river users
- Conduct all work (dredging, capping and transportation) at RM 10.9 on the River
- Ensure that dredging and capping will not cause flooding and not increase the likelihood of flooding in the future
- Operate so that no untreated or treated sediment or capping materials will be staged in Lyndhurst or moved on local streets or highways

In coordination with the United States Environmental Protection Agency (EPA), CPG will work with local community groups and government agencies to protect community health and safety and keep the community well informed.



# 1.1 Removal Action and Schedule Summary

The Removal Action will be conducted pursuant to an Administrative Settlement Agreement and Order on Consent for Removal Action (AOC; Docket No. 02-2012-2015 effective on June 18, 2012) and in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The AOC requires the removal of the highly contaminated surface sediments within the Removal Area and defines the RM 10.9 Removal Area to include that area that is exposed at low tide.

## 1.1.1 Removal Action Objectives

The RM 10.9 Removal Action objectives include the following:

- Reduce the potential for exposure to sediment present in the RM 10.9 Removal Area
- Remove approximately 20,000 cy of surface sediment (top 2 ft) and stabilize it at an existing permitted facility
- Construct an engineered cap in the Removal Area to physically and chemically isolate the underlying sediment

#### 1.1.2 Removal Action Activities and Schedule

A design package has been competitively bid out by the CPG's General Contractor to potential subcontractors for specific engineering operations with an anticipated award date in early May 2013. However, the field schedule is planned and the activities that communities and river users can expect are as follows:

Date	Activity
May – July 2013	Baseline monitoring for surface water and air quality
	Small boats and moorings will be upstream, downstream, and within the Removal     Area collecting water quality measurements
July 2013	Mobilization of the equipment
	Barges and dredging equipment will be mobilized from NJ Harbor areas to RM 10.9
August – September 2013	Dredging and barge transport, sediment stabilization, transportation and disposal at an out-of-state landfill
	<ul> <li>Dredging at RM 10.9 Removal Area from dawn to dusk six(6) days per week (~12 hours/ day) for about approximately 6-8 weeks</li> </ul>
	Barge transport for dredged sediments from Removal Area to the stabilization facility in the NJ Harbor area once a day and probably at night so that bridge

	openings will have minimal impact on the local traffic
	Sediment stabilization at treatment facility
	Train/truck transportation of treated sediment to an approved out of state landfill for disposal
	Surface water and air quality monitoring
October – December 2013	Barge transport of cap material to Removal Area from construction support area throughout the day
	Cap construction at Removal Area from dawn to dusk six(6) days per week
	Surface water and air quality monitoring; bathymetry surveys using small boats
	Demobilization; removal of equipment from Removal Area out of the LPR

# 1.2 Project Description

The Removal Action Final Design document provides engineering details for the project. This section provides an overview of the four engineering operations of the Removal Action:

- · Dredging and barge transport
- Stabilization
- Capping
- Overland transport and final disposal

#### RM 10.9 Removal Action Quick Facts:

What – Remove and dispose of approximately 20,000 cubic yards of sediment and construct an isolation cap on the Removal Area.

**Why** – Surface sediment contains dioxins, PCBs, and other contaminants at elevated concentrations

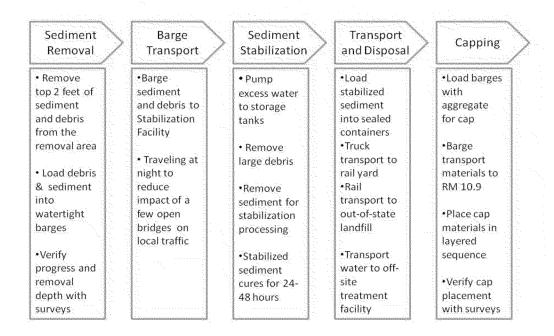
**Where** – Approximately 5.6-acre area of the Lower Passaic River next to Riverside Park in Lyndhurst, NJ

**How** – Working entirely from the River; ensuring Community Health & Safety by communicating with the Public

**When** – Construction is expected to begin in July 2013 and be completed in December 2013

Who – Based on an agreement with EPA, the Cooperating Parties Group. is funding and performing the Removal Action, while EPA is providing project everyight.

# Major steps in the RM 10.9 Removal Action



#### 1.2.2 Dredging and Barge Transport

The first phase of the Removal Action will consist of the following activities:

- Dredging
- Transporting the dredged material by barge to the Clean Earth Dredging Technology Koppers Dredged Material Processing Facility(DMPF) located in Kearny, NJ
- Monitoring surface water quality

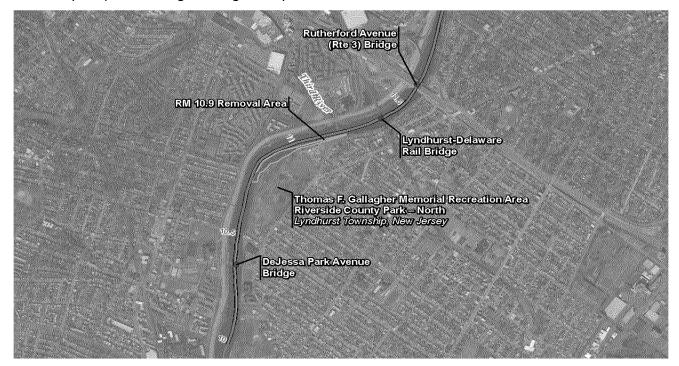
## 1.2.2.1 Dredging

Dredging will be performed with shallow draft vessels capable of removing all the sediment from the water side of the Removal Area in water depths of approximately 2.5 to 4.0 ft. The dredging work will be carried out using a hydraulic excavator situated on a spud barge (100 ft x 40 ft). The excavator will be equipped with a 3  $yd^3$  environmental clamshell bucket specifically designed for removal of contaminated sediment while minimizing the potential of suspending solids in the water column.

In order to minimize potential impacts to the local community, dredging will not occur during night time hours. The number of daylight hours of dredge operation will be determined by what is necessary to maintain the planned dredge production given the size of the dredge bucket. For planning purposes, it is assumed that dredging will be performed with a 3 yd<sup>3</sup> environmental bucket and that operations will be permitted during daylight hours within a 12 hours/day window which is generally between hours of 6 AM and 6 PM.

#### 1.2.2.2 Transport

The dredged sediment and debris will be transported to the stabilization facility in several (2) 1500 yd³ barges (150′ x 40′ x 22′) using two tugboats. At a minimum, 10 bridges on the Passaic River and one on the Hackensack River will require opening for material transport. Five of these bridges have significant vehicle traffic and include the DeJessa Park Avenue Bridge (RM 10.37), Rutgers (Route 7) Bridge (RM 8.53), Clay Street Bridge (RM 5.83), Bridge Street Bridge (RM 5.41), and the Jackson Street (RM 4.37). The bridge openings must occur within 2 hours of high tide. Bridge openings will try to be scheduled during non-peak traffic times, including overnight, but it may be necessary to open the bridges during the day as well.



1.2.2.3 Surface Water Quality Monitoring

The conditions at the Removal Area are favorable for minimal sediment re-suspension and transport of the

#### contaminants for the following reasons:

• The average river flow for the implementation months of July thru October is anticipated to range from 500 to 800 cfs which is below the annual average flow rate of approximately 1,200 cfs. This lower flow range represents an average river velocity of approximately 1.5 ft/sec (0.45

m/sec). The highest river velocities are expected on the ebb tides at 1.64 ft/sec (0.5 m/s), still below the annual average.

Bathymetry of the Removal Area is relatively shallow with the entire area having an average water depth of less than about 4 ft. In addition, approximately 1/3 of the area is exposed at low tide resulting in some removal occurring "in the dry". The site conditions, therefore, significantly reduce the typical vertical heights through which resuspension can occur.

Although the potential for release of sediment into the water column is low, Best Management Practices will be used to reduce the potential even further.

• The chemicals in the sediments such as dioxins and PCBs are highly hydrophobic meaning that they stick to sediment and do not easily dissolve in water. Also no free product contamination of any chemical has been observed in the Removal Area sediments.

In summary, favorable conditions at the RM 10.9 Removal Action area during the project will keep the release of sediment into the water column at a very low level. Although there is a low potential for release, additional steps will be taken to reduce the potential for impact even further. These steps are following Best Management Practices (BMPs) identified by the NJDEP and US Army Corps of Engineers (USACE, Technical Guidance for Environmental Dredging of Contaminated Sediments (ERDC/EL TR-08-29) September 2008).

BMPs to control turbidity during the Removal Action will include:

- Deploy a localized heavy-duty silt curtain close to the active dredging areas to slow water velocity around the dredge barge in which sediments suspended by the dredge can sink back to the bottom.
- Use a closed, watertight (i.e., environmental) clamshell bucket which reduces release of sediment to the water (typical navigational dredge buckets do not seal and securely contain their contents)
- Maximize the size of the "bite" taken by the clamshell which reduces the amount of water in the bucket and reduces resuspension of sediment
- Slowly withdrawing the clamshell through the very short water column (typical navigational dredging is a fast operation; environmental dredging is a much slower and controlled process)
- Prohibit barge overflow or rinsing sediments off the sides/gunwales of the barge
- Deliberate movement of the closed bucket to the receiving barge after completing a cut to reduce water leakage from the clamshell bucket into the river to the extent practicable.
- Prohibit "re-handling" or stockpiling of material on the river bottom
- Prohibit raking for debris removal
- Avoid grounding of marine vessels and allowing water levels to rise before attempting to free grounded vessels
- Minimize the number of trips by support vessels which minimizes the potential for resuspension caused by support vessels
- Restrict the draft of workboats and barges so that the potential for running aground or propellers disturbing the sediment is further reduced.
- Reduced speeds for boats and barges reducing potential to stir up sediment
- Restrict the size and power of workboats
- Prohibit any type of prop-washing which can significantly stir up sediment

The CPG's General Contractor's on-site project managers will be responsible (with EPA oversight) to make sure that subcontractors are following BMPs. To ensure the effectiveness of these BMPs, water quality will be monitored during all dredging operations. Section 4.7 describes the implementation monitoring for turbidity control.

#### 1.2.3 Stabilization

The barges from the dredging operations will be docked at the Clean Earth Dredging Technology – Koppers Dredged Material Processing Facility (DMPF) located in Kearny, NJ in the second stage of the project. Once the dredged-material barge is secured at the stabilization facility, primary responsibility for the safe and approved treatment of the sediment will transfer to the facility operator. The CPG and its General Contractor will work with and monitor the activities of the stabilization facility to ensure that its activities and impacts on the local community are understood and managed. Activities at the stabilization facility with RM 10.9 sediment will include:

- Barge dewatering (as required)
- Off-loading dredged material from the barges
- Material separation (screening, mixing)
- Stabilization of the sediment with at least 8 percent Portland cement
- Temporary storage of the treated sediment at the stabilization facility

The RM10.9 Final Design Report includes a more detailed description of each of these elements.

#### 1.2.4 Capping

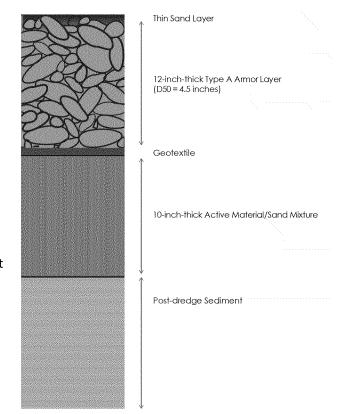
An engineered cap will be placed over the Removal Area as the third stage of the Removal Action. Issues being addressed to ensure a properly constructed and effective cap include the following:

- Material selection (what material can protect the underlying sediments both physically and chemically?)
- Cap placement plan (How should the cap materials be layered?)
- Erosion control (How to ensure the cap will not be eroded?)
- Cap material delivery and staging (Where do the cap materials come from and how do they get to RM 10.9?)
- Cap placement (How do we get the cap materials in the right place in the river?)
- Water quality monitoring (How do we make sure that during the cap placement there isn't an impact to water quality?)

The following is a brief description of each activity as it is currently envisioned. Subcontractors preparing bids for capping have the ability to suggest alternatives which must be reviewed and approved by the CPG and EPA prior to implementation.

#### 1.2.4.1 Cap Material Selection

The cap will be constructed over the Removal Area to physically and chemically isolate the remaining sediment



contaminants from the environment by means of physical containment, chemical containment, and erosion protection. The cap design has considered several aspects of the physical environment including water body dimensions, depth and slope of the sediment bed, flow patterns, and potential disturbances. The cap design also takes into account expected effects of bioturbation, consolidation, and erosion to ensure its integrity over time.

The cap material and layering are described as follows:

- **Sand-Active Layer** A combined sand and active layer will be placed on the contaminated sediment. This layer will be composed of 3 to 6 inches of activated carbon and 4 to 7 inches of sand.
- **Geotextile** Layer(s) of geotextile will be placed between the sand-active layer and the armor layer. The function of the geotextile is to protect the active layer during placement of the armor layer and prevent the active material from being eroded or gouged through the protective stone layer.
- **Armor Layer** A layer of large gravel or small stone will be placed over the geotextile to prevent erosion and exposure of the underlying cap layers. This layer is designed to resist flows in excess of a 100 year flow event.

Following placement of the armor stone, sand or approved soil will be placed over the stone to fill in the spaces between the stones on the top of the armor layer. This sand or approved soil will be placed such that it does not exceed the original surface elevation.

#### 1.2.4.2 Cap Placement Plan

The cap placement activities will likely occur from equipment located on barges with material supplied by material barges. Determination of the actual equipment to be used will be the responsibility of the selected cap placement subcontractor. Armor stone will be placed by a clamshell bucket from a barge.

#### 1.2.4.3 Cap Material Delivery and Staging

Sand cap and armor material will come from local/regional sources of these types of material. The selection of the vendor will include an evaluation of the vendor's operations to ensure the material is free of contaminants. The cap materials will most likely be loaded on barges at one of the regional aggregate suppliers and then delivered to the Removal Area by barge. The active layer and geotextile will come from specialty companies with certifications of the material composition.

#### 1.2.4.4 Water Quality Monitoring

There is a potential that during cap placement resuspension of sediment could occur. Therefore, turbidity will continue to be monitored in a manner similar to the monitoring program for the dredging operation.

#### 1.2.5 Overland Transport and Final Disposal

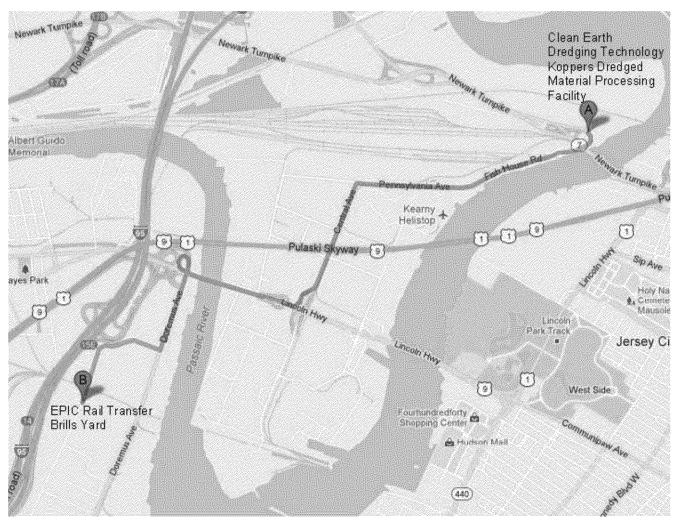
The final phase of the project will be transporting the stabilized sediment, oversized material (+4 inch), debris and excess barge water for off site disposal. The stabilized sediment and +4 inch material and debris will be transported to Clean Harbor's Subtitle C landfill (Lone Mountain LLC) located in Waynoka, Oklahoma. The excess barge water will be transported to Clean Harbor's permitted water treatment facilities located in Baltimore, Maryland or Bristol, Connecticut. These disposal facilities are permitted and approved to receive the treated sediment and excess barge water.

The stabilized material and +4 inch material and debris will be placed in lined and tarped intermodal containers and then transported by truck to the rail loading facility only 3 miles away located at 319 P. Avenue in Newark, NJ. The intermodal containers will be transferred to rail cars for transport to Clean Harbor's Lone Mountain Subtitle C Landfill. Once at the landfill the containers will be is transferred from the rail cars to a straight roll off truck for delivery and discharge within the landfill. Throughout the entire loading, transportation, delivery and discharge cycle, the containers will never touch the ground.

The wastewater will be transferred from storage tanks at the stabilization facility to tankers and/or vacuum trucks for transport to either Clean Harbor's permitted water treatment facilities located in Baltimore, Maryland or Bristol, Connecticut.

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Once the stabilization vendor loads the trucks/tankers that will transport the sediment/wastewater to the disposal facility, responsibility to minimize community impacts will primarily shift to the disposal facility. The CPG and its General Contractor will work closely with the selected disposal facility to ensure that risks associated with the treated sediment/wastewater are understood by the disposal facilities so that they can develop appropriate plans to protect the communities through which the sediment/wastewater will be transported and the community surrounding the landfill. The means of transportation will be a combination of truck and rail.



(Base map - Google Maps)

Truck route from Clean Earth Dredging Technology facility to the Brills rail transfer yard.

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# 2 PROJECT SCHEDULE AND OPERATIONS

The general sequence of activities for each of the four engineering operations of the Removal Action is guided by the engineering technical specifications but the specific sequence will be dependent on the plans of the selected subcontractors implementing the work. The project schedule and operation timeline presented in this section are based on the requirements included in the engineering technical specifications. Details on the final schedule and hours of operation will be finalized after completing the bid and award process.

# 2.1 Project Schedule

A project schedule including all major engineering operations is shown in Attachment A. The schedule provides approximate completion dates for the implementation of the Removal Action. There are two key milestone dates driving the overall schedule – end of rowing season on June 16 and end of the fish window on July 1. There will be no in-water operations (i.e. dredging) until the passage of these dates.

Dredging and barge operations are therefore scheduled to begin on August 2<sup>nd</sup> and estimated to be completed by mid September 2013 based on the production assumptions/hours of operation stated below. Cap construction is scheduled to begin mid October 2013 and be completed by early December 2013.

# 2.2 Hours of Operation

#### 2.2.1 Dredging and Barge Transport

The dredge production rate will be dependent on the size of bucket, size of barges, hours of operation, and operational parameters (e.g., cycle time, excess water, equipment up time, time to change barges). For planning purposes, it is assumed that dredging will be performed with a 5 yd³ environmental bucket and that operations will be permitted only 12 hours/day based on the current stabilization operation, resulting in a daily production rate of approximately 450 yd³.

Dredging operations will be assumed to be a 12-hour-per-day, 6-day-per-week operation. One day per week will be reserved for maintenance activities. Bridge openings will also be required to support the transport of dredged materials and capping materials to and from the Removal Area. It is anticipated that eleven (11) bridges will require opening to support the transport of materials to and from the project site. These bridges include the DeJessa Park Avenue Bridge (RM 10.37), Rutgers (Route 7) Bridge (RM 8.53), Clay Street Bridge (RM 5.83), Morristown Line RR Bridge (RM5.57), Bridge Street Bridge (RM 5.41), the Penn RR bridges at Center Street, Market Street and Amtrak Dock Bridge (RM 4.75), Jackson Street Bridge (RM 4.37), Point-No-Point Conrail (RM 2.33), RR Howell Street Bridge/Harsimus Branch Lift Hackensack River (RM3.1). The bridge openings must occur within 2 hours of high tide. Bridge openings will try to be scheduled during non-peak traffic times, including overnight, but it may be necessary to open the bridges during the day as well.

#### 2.2.2 Capping

The cap will be placed following completion of the dredging to control residuals generated during dredging and to minimize the risk of contaminating the clean cap material. The physical constraints of the site make it difficult to have both dredging equipment and capping equipment both with material barges operating at the same time. The cap will be placed as soon as practical after the dredging operations have been completed.

Placement of cap materials will be limited to 12 hours per day or during daylight hours only, whichever is less. The number of days per week of placement operations will not be mandated, but they are expected to be either 6 or 7.

# 2.3 Schedule Change Notification

Changes to the overall schedule or projected daily operations will be documented in weekly progress meeting minutes which will be posted to the project website identified in Section 6.1.

# 3 ASSESSMENT AND MANAGEMENT OF POTENTIAL HAZARDS

The prevention of potential hazards primarily involves on-site workers or oversight individuals. If on-site workers are taking the necessary precautionary measures, however, potential hazards in the Removal Area will also be mitigated. On-site hazards which will govern worker activities are detailed in the CPG's General Contractor's HASP. The hazard assessment in this CHASP is focused on potential hazards that could have an adverse impact on community health, safety and property.

# 3.1 Assessment Methodology

Safety and protection of the environment is the first and foremost important consideration of any environmental remediation project. In order to comprehensively assess the potential for hazards, each activity that will be conducted as part of the remediation is reviewed by the project team on a task by task basis and an overall assessment of the potential for risk is assessed. Potential for risk is assessed by:

- · Identifying the hazard
- Evaluating the hazard for the likelihood of occurrence and potential impact
- Identifying proactive activities that can be undertaken to reduce hazards and limit or mitigate the impact of an accident should it occur
- Establishing prevention steps for each risk to insure that any hazard potential has been managed

Not all potential hazards can be identified and controlled; therefore, mitigation measures may need to be implemented to minimize the impact of any uncontrolled hazard. Hazard identification and management is identified below along with potential mitigation measures for potential accidents.

# 3.2 Potential Hazard Identification, Management and Mitigation

A review of the anticipated site construction activities have been performed and the following hazards have been identified for this project:

- Collision Involving Project Vehicle on Local Roadway
- Collision Involving Project Vessel on Passaic River
- Damage to Public Utilities, Bridges and Other Structures
- Spill or Release During In-River Activities
- Security of Project Property and Equipment

#### 3.2.1 Collision Involving Project Vehicle on Local Roadway

Trucks and other types of motor vehicles will be used during the Removal Action, however, there will be no vehicle access permitted at the three properties adjacent to the Removal Area (Riverside Park, Municipal Recreation Area, or the PRC greenway). Material and equipment deliveries will be via barge. Any incidental personnel traffic will be consistent with ongoing use of public roadways and parking areas. Safe driving techniques will be part of daily project health and safety briefings.

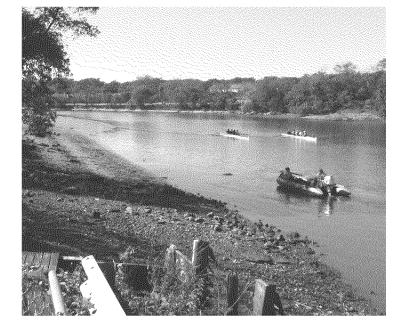
#### 3.2.2 Collision Involving Project Vessel on Passaic River

Passenger boats, barges and other types of vessels will be used throughout the Removal Action to transport people, material and equipment to the Removal Area. The subcontractor implementing the dredging and capping operations will conduct the work with means and methods that minimize obstruction to the navigation channel. Even with the intent of minimizing use of the navigation channel,

Numerous safety measures will be used to protect and warn boaters including signs, lights and buoys and extensive communication about project activities on the River

the increase in vessel activity creates a potential of on-water collisions. The following precautionary measures will be taken to prevent on-water collisions:

- <u>Dredge Plan</u> A vessel management plan will be prepared for on-water vessels including those operated by supply vendors. The number and size of tow boats and self propelled barges to be used shall be specified in the Dredge Plan. The tow boats and self propelled barges shall be of a size adequate for pushing the anticipated load and shall have necessary reserve power for maneuvering with material barges under emergency conditions as well as for control of material barges at the offloading or disposal point.
- <u>Notice to Mariners</u> Vessel operators shall communicate with the US Coast Guard, Department of Homeland Security, Newark Bay Port Authority, USACE, and other appropriate agencies on a regular basis concerning their planned activities so the appropriate Notice to Mariners and navigation restrictions can be issued or modified. If equipment does obstruct the navigation channel and makes the passage of vessels difficult or endangers them, equipment will be reconfigured to afford practicable, safe, and expedient vessel passage as quickly as practicable and safe to do so but in a manner that does not to cause other hazards.
- <u>Vessel Positioning</u> All tow boats and self-propelled barges used for moving barges and transporting material
  and other equipment shall be equipped with DGPS navigational equipment, radar, corrected compass, at least
  two marine VHF radios, an AlS transponder, and depth sounding equipment which is to be maintained in good
  operating condition during each tow.
- On-Board Communications A system of communication (VHF radios) between the dredge crew, barge
  operators, and all other project related vessels on the river shall be provided. The VHF channel and call signs
  for the project will be provided once established with the contractors.
- Vessel Operation and Licensing . All vessels will be required to travel at safe speeds and within established routes and time periods per established plans and limitations that may be imposed by navigational restrictions. All vessels will be required to carry on board adequate fuel to avoid risk to operation such as running out of fuel. All vessels that are to remain stationary for any period of time will be anchored or moored to prevent drifting or unintended movement. All vessels will have current licenses indicating current inspections have occurred and that proper health and safety equipment is on board.
- Vessel Safety Equipment All on-water work areas will be clearly designated using buoys, lights, day shapes
  and signage to warn both project and non-project related vessels of the restricted location and restriction in
  ability to maneuver. The dredging barge will display proper day shapes and lights for dredging operations
  - including the indication on which side dredging operations are occurring and which side is safe to pass. Other working vessel will display day shapes and lights as appropriate. All working vessels will monitor VHF Bridge to Bridge channels. While there is currently no projected nondaylight hour activity projected at the Removal Area, any operations that may have to be performed during the nondaylight hours shall be properly illuminated to allow for the complete performance and inspection. Work lighting shall conform to Newark Bay Port Authority and USACE requirements for visibility and color.
- Recreational Boaters and Rowers -Special communication will be established to keep local recreational boaters and



rowers informed of the movement of project vessels. A schedule of the movement of barges will be posted on the project website www.rm109.com and can be posted daily at each of the rowing clubs, at the Riverside

Park and other areas that would be helpful. Project vessels will have navigational lighting and there will be buoys marking the removal area. Lights will be made available to the rowing clubs so that the rowers can place them on their skulls if rowing very early in the morning or at dusk. This lighting will alert barge operators to the presence of recreational boaters. In addition, if on-river work is not completed before the Head of the Passaic Regatta scheduled for the weekend of October 12-13, then work will be stopped and vessels secured away from Regatta activities prior to the start of that weekend.

Signs will be installed along the park shoreline to inform park visitors and on water visitors of the removal project and will provide contact information if additional information in needed.

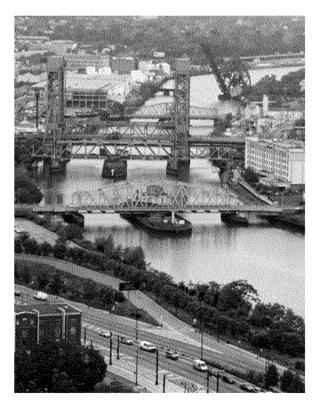
#### 3.2.3 Damage to Public Utilities, Bridges and Other Structures

Two Jersey City water supply lines and a solid wire cable (possibly an abandoned boat mooring line) have been identified as crossing the RM 10.9 removal area footprint. The solid wire cable is to be removed but a "No Dredge Zone" has been established around the water supply lines in order to protect the integrity of these utilities. There is also a Passaic Valley Sewer Commission (PVSC) sewer trunk that crosses the river near the northern terminus of

the Removal Area. While the sewer trunk is not believed to be in the Removal Area, its location will be marked and appropriate offsets enforced to ensure that the integrity of that pipe is not threatened. No mitigation measures have been defined for these crossings because no dredging activity will occur near the utilities.

The seventeen (17) bridges on the LPR between the Removal Area and Newark Bay represent a key navigational consideration for sizing of barges and other construction support vessels that must travel between the Removal Area and the Newark Bay. All vehicles and vessels will be operated in a controlled manner to avoid collision with stationary bridges or other public structures, however, there is the potential for vessels to veer off course and braise or directly contact structures. The following precautionary measures will be taken to prevent damage to bridges and other public structures:

 <u>Established Navigation Routes</u> - Comprehensive information has been reviewed on each bridge including type, horizontal and vertical clearances, bridge owner, contact information, opening coordination requirements, and any ongoing



- construction/ maintenance currently scheduled or planned for 2013 construction season. Based on this information, a navigation route from RM 10.9 to the mouth of the river has been defined. This information is provided in the RM 10.9 Final Design Drawings but will also be documented and transferred to each on-water vessel for permanent display.
- Vessel Operator Training and Notification All vessel operators will have the appropriate training and licenses
  to operate their vessel. In addition, safety briefings will be held with all personnel to review on-water
  restrictions and ensure that all personnel have specific instructions on follow-up actions in the event of a
  collision.
- Vessel Operation and Licensing . All vessels will be required to travel at safe speeds and within established routes and time periods per established plans and limitations that may be imposed by navigational restrictions.

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- <u>Structure Identification and Warning</u> All structures should be permanently marked and where appropriate, lit to insure that the location is visible even in compromised conditions such as fog or non-daylight hours.
- <u>Emergency Preparedness</u> In the event of contact with any of the bridges, the vessel will be required to have an emergency notification plan compliant with maritime requirements.

#### 3.2.4 Spill or Release During In-River Activities

All operating vessels will be required to hold current licenses and undergo routine inspections to minimize the risk of on-water spills or releases resulting from equipment that is in a state of disrepair or not adequately maintained. All personnel will be educated on proper refueling techniques to minimize potential for spills and releases. Despite these safety precautions, there is the potential for on-water spills to occur. The following specific precautionary measures will be taken to prevent on-water spills and releases:

- Refueling Operations All refueling activities will comply with U.S Coast Guard regulations for on-water fuel distribution.
- <u>Spill Prevention and Response Plan -</u> All vessel operators will have a spill prevention and response plan for the containment, cleanup and removal of any oil spills and other oil releases that may occur as a result of project activities. Response measures implemented will be monitored and assessed for effectiveness in controlling the pollution event and likelihood of preventing a repeatable event. All personnel will be educated on the spill release activity response plan.
- <u>Spill Response Equipment</u> As part of the spill response plan, mobile spill response kits will be available on each marine vessel, at the river-to-land unloading location(s), adjacent to the sediment stockpiling area, and in required site vehicles.
- <u>Spill Response Training</u> A practice drill for responding to on-water spills will be conducted to insure all personnel potentially involved will have recent and on-site experience to safety and effectively contain and clean up a spill.

#### 3.2.5 Security of Project Property and Equipment

The Removal Area will be identified and signage erected to minimize trespasser access to the active construction area. Security will be provided 24 hours a day/ 7 days a week to secure the Removal Area and adjacent Riverside Park property. Despite these initiatives, it is possible that trespasser access to the site may occur and potential hazards resulting from the trespasser should be mitigated. The following specific precautionary measures will be taken to address security issues:

- <u>Staff Training</u> Personnel will be educated on safe and effective ways to encounter the trespassing individual and give appropriate instructions for leaving the site. The same personnel will be given rules for when to disengage communication with the trespasser and contact the Removal Area security and local police.
- Prevention of Vandalism to Site Vessels and Equipment All equipment and vehicle will be secured when not
  in use. No vehicles will be left unintended with keys for ignition available. To maximum extent possible,
  vehicles will be removed on a daily basis.
- <u>Creating Safe Site Working Environment</u> There will be adequate lighting during non-daylight times. During
  all safety briefings, any incident of trespasser access to the site will be relayed to onsite personnel and plans
  for further securing site access and vehicles will be implemented.

# 4 MONITORING PROGRAM

The RM 10.9 Removal Action has been designed to meet the objectives established by legal agreements with EPA and to be performed in compliance with regulatory requirements. A monitoring program is planned to ensure that the objectives of the Removal Action are meet. This program will be implemented during all phases including pre-construction, construction and post construction. The Construction Quality Control Plan (CQCP), Appendix I of the Draft Final Design, is the detailed plan that includes the quality assurance (QA) and the quality control (QC) procedures and practices to be implemented during the various phases of work. The CQCP is a living document and will be revised and amended as necessary throughout the project; for example, when subcontractors have been selected for the project. This section of the Community HASP provides a summary of the details in the CQCP.

# 4.1 Summary of Monitoring, Control and Documentation

The CQCP describes the organization, procedures, and documentation to be used by the CPG and its contractors in successfully completing the Removal Action efforts. It relies on the following fundamental principles:

- Ensure timely and error-free execution of work through preliminary planning meetings before starting work
- Ensure compliance with project plans and specifications by reviewing all relevant documentation
- Ensure high quality workmanship through adequate supervision and daily QC inspection and testing during work execution
- Ensure timely resolutions of non-conformances and discrepancies through prompt notification of interested parties.

The tasks of the RM 10.9 project are grouped into definable features of work (DFOW), which are work activities that are significant enough to warrant separate inspections. The most significant DFOWs for this project are:

- Dredging
- Barge transportation
- Stabilization of sediment and treatment of dredge decant water at an off-site treatment facility
- Capping
- Load-out and transportation of stabilized sediment to an out-of-state landfill
- Air monitoring
- Weather monitoring

Each of these is briefly described in the remainder of this section.

#### 4.2 Dredging

The project requires that 2 feet of sediment be removed from an approximately 5.6 acre area. The method to determine dredging progress is bathymetric surveys which provide a detailed map of the sediment surface elevation. During dredging the contractor will implement the following surveys:

- Pre-dredging bathymetric survey
- Interim quality control bathymetric survey and other static measurements
- Post-dredging bathymetric survey

Accurate positioning of the dredging equipment is important to know exactly where the dredge bucket is when removing sediment. The dredging contractor will use real-time tracking GPS software that will record all the movements of the sediment removal bucket. The software allows the dredge operator to see exactly where the bucket is within the removal area at all times. All survey data will be stored and used to verify that all the areas of the removal area have been dredged.

To monitor dredging progression the following information will documented:

- Daily dredge volume and area in which dredging occurred
- Weekly dredge volume versus planned volume
- Debris composition and volumes

# 4.3 Barge Transportation

Barge transportation includes barges used to transport equipment, debris and dredged material, and capping material either to or from the RM 10.9 Removal Area to areas within the NJ Harbor region.

The dredging subcontractor will be required to provide detailed information concerning the movement of barges during the project. Requirements for the dredging subcontractor include:

- A vessel management plan for on-water vessels including those operated by supply vendors as well as vessels under the Subcontractor's direct supervision.
- Communication with the US Coast Guard, Department of Homeland Security, Newark Bay Port Authority,
  USACE, and other appropriate agencies on a regular basis concerning planned activities so the appropriate
  Notice to Mariners and navigation restrictions can be issued or modified.
- All tow boats and self-propelled barges used for moving barges and transporting material and other
  equipment shall be equipped with DGPS navigational equipment, radar, corrected compass, at least two
  marine VHF radios, an AIS transponder, and depth sounding equipment which is to be maintained in good
  operating condition during each tow.
- Communication with operators of bridges that may need to be opened during barge transport.

#### 4.4 Sediment Stabilization

Stabilization of the dredged sediment will occur at a commercial facility down river from RM 10.9 in the Newark Bay area. Sediment treatment as a DFOW occurs from the time the contaminated sediment is removed from the barge to the time the stabilized material is loaded into trucks for transport to the offsite landfill for disposal. The sediment stabilization treatment steps include the following:

- Pump the supernatant from the barge to water holding tanks
- Remove the dredged material from the barge
- Screen the dredged material to remove debris and oversize material
- Convey the sediment to the pug mill mixer
- Stabilize the sediment by mixing it with Portland cement
- Transfer treated sediment to a storage/staging area
- Load the treated sediment into lined intermodal containers for truck/rail transport to the approved offsite disposal facility.

The following records and documentation will be collected and monitored during sediment treatment:

- Volume of dredge decant water pumped to storage tanks per barge
- Volume of dredge decant water pumped to storage tanks daily
- Volume and number of tanker trucks loaded daily for off-site treatment of dredge decant water
- Volume of water treated daily by off-site water treatment vendor
- Coarse material separation
  - Qualitative description and daily volume of large debris removed from the barge
  - Qualitative description and daily volume of debris greater than 4 inch separated by the grizzly/shaker screen
- Stabilization
  - Weight records of the pug mill feeder conveyor belt
  - Weight records of the cement that will be added to the sediment during stabilization

- Average mixing time of the sediment and cement in the pugmill
- Daily volume of sediment stabilized
- Paint filter and plasticity testing results and cure time in hours

# 4.5 Load-out and Transportation of Stabilized Sediment to Out-of-state Landfill

After a cure period of 24 to 48 hours the treated sediment will be subject to paint filter and plasticity tests to ensure it can be transported to the out-of-state landfill without producing free liquids. Following the receipt of acceptable test results the treated sediment will be loaded into lined intermodal containers for truck/rail transport. The recorded information will include:

- Transportation container inspection results
- · Verification that liners and tarps are properly installed
- · Record of daily containers leaving stabilization site and net weight
- Waste manifest number, rail car or truck id numbers
- Landfill information
- Number of intermodal containers, trucks and rail cars received
- Description and condition of material received by the landfill
- · Net weight of the material received
- Description of any additional solidification required prior to disposal.

# 4.6 Capping

A cap will be placed over the post-dredge sediment surface to isolate the remaining contaminated sediment from the environment by means of physical containment, chemical containment, and erosion protection. To achieve the containment and protection objectives, the cap will be designed with multiple layers installed in the following order – a combination of sand and reactive material, a geotextile fabric, and armoring stone with sand to fill in the armor stone. The post-dredge bathymetry survey will be the starting elevation for the cap design.

The following information will be collected during placement of the sand layer

- Volume of sand brought to the site
- Volume and rate of material placement per designated square area
- Regular thickness measurements via settling pans
- Post sand placement bathymetry survey

Similar information will be collected during placement of the reactive and armor layers.

# 4.7 Water Quality Monitoring

The proposed Removal Action dredging and capping operations have the potential to disturb and suspend sediments within the water column, which if uncontrolled may cause impacts on the immediate and downstream river environment. Dredging and capping Best Management Practices (BMPs) will be implemented during the RM 10.9 Removal Action as necessary to reduce the potential for river water quality impacts during operations. A water quality monitoring program will also be established to identify conditions that have the potential to cause adverse environmental impacts based on the exceedance of trigger levels and to respond to and manage such events, including investigation and mitigation measures. A summary of the water quality monitoring program is provided in the following sections.

#### 4.7.1 Resuspension Monitoring

Turbidity monitoring has been used on other dredging projects as a real-time indicator of resuspension due to dredging and capping operations. A site-specific relationship between turbidity and TSS will be established for the

RM 10.9 Removal Action using both historical and project specific data.

Four stationary buoyed monitoring locations and one mobile buoyed monitoring location are installed upstream and downstream of the RM 10.9 Removal Area to measure turbidity during dredging and capping operations. The continuous monitoring locations are positioned as follows:

- Fixed Turbidity Buoy #1: Downstream "ambient" location at RM 10.2, approximately 0.5 miles (2,650 ft) downstream of the Removal Area's southern perimeter boundary
- Fixed Turbidity Buoy #2: Downstream location approximately 200 ft downstream of the RM 10.9 Removal Area's southern perimeter boundary
- Fixed Turbidity Buoy #3: Upstream location approximately 200 ft upstream of the RM 10.9 Removal Area's northern perimeter boundary
- Fixed Turbidity Buoy #4: Upstream "ambient" location at RM 11.7, approximately 0.5 miles (2,650 ft) upstream of the Removal Area's northern perimeter boundary
- Mobile Turbidity Buoy #5: This mobile operational buoy will be moved as needed to monitor turbidity within
  the Removal Area outside of the resuspension management system,
  silt curtains.

  Real-time air monitoring supplements

Upstream and downstream baseline measurements (turbidity buoys #1, #2, #3 and #4) will begin at least 1 month prior to dredging activities and cease after completion of capping operations. Real-time turbidity monitoring will be performed at 15-minute intervals.

Real-time air monitoring supplemented by air sampling and analysis for target COPCs will be conducted. Off-site odor conditions will monitored based on multiple sources of information including community concerns.

The U.S. Environmental Protection Agency (EPA) has established the following action levels and procedures:

- If the turbidity "trigger level" of four consecutive 15-minute readings (i.e., 60 minutes) at Fixed Turbidity Buoy #2 or #3 is 30 NTUs above ambient conditions is met, the dredging/capping operator will be notified and directed to evaluate dredging/capping Best Management Practices.
- If the turbidity "action level" of four consecutive 15-minute readings of 30 NTUs above ambient conditions occurs and the total value is greater than 50 NTUs at Fixed Turbidity Buoy #2 or #3 over this period is met, dredging/capping will be suspended after a brief evaluation of site conditions. Dredging/capping will resume when the turbidity level returns to below the 'trigger level' of 30 NTUs above ambient conditions or dredging is determined not to be the source.
- If dredging is suspended, water column samples will be collected at designated buoy locations to analyze for target chemicals.

#### 4.7.2 Data Management

The turbidity data recording and notification system involves the continuous downloading of turbidity results via telemetry to a central database. These results are then uploaded to a website which may be viewed by authorised users.

#### 4.7.3 Visual Observations

If a plume or sheen is observed emanating from the silt curtain deployed around the active dredging/capping operations, specific measures will be taken to control the event, prevent further impact and take corrective measures in order to prevent potential for a recurrence. This will include collection of samples for laboratory analyses.

Due to the proximity of the public to the dredge and barge loading in the vicinity of RM 10.9, the NJDEP has requested that the CPG evaluate the potential of the dredging operations to emit air emissions (Potential to Emit (PtE)). Potential emissions were assumed to come from the dredged sediment. The modeling work concluded that the PtE for the COPCs present in the RM 10.9 sediment is below the NJDEP reporting threshold. The PtE for dioxins and PCBs were 3.5 and 4.5 times below the threshold respectively.

While modeling predicted no exceedance of NJDEP reporting threshold values, there is the potential for odors from the operation. Consequently, the CPG will conduct real-time air monitoring supplemented by air sampling and analysis for target COPCs.

Wind-borne dust is a transport pathway for potential inhalation exposure hazards relative to the dredging and capping activities. Many of the compounds are primarily a concern as particles or as contaminants adhered to particles, particularly for semi-volatile compounds which have a very low vapor pressure. The Removal Action, however, involves river sediments that will be moderately wet to saturated during the dredging operations and therefore minimal particulate exposure is anticipated.

The nature of the exposure at an off-site public location can be:

- Sub-chronic, or shorter-term (typically occurring for a few months or a year), or
- Chronic, or longer-term, (typically occurring for several years),

The RM 10.9 dredging activities will only occur for approximately 60-days so any exposure would be considered sub-chronic. Given the relatively low level concentration of chemicals of potential concern (COPCs) found in the sediment, health risks if any would only be associated with long-term exposure and not any incidental or short term exposure since:

- Adverse health effects from the inhalation of these constituents are associated with much higher concentrations than are reasonably generated in an open air setting by dredging related dust emissions; and
- Natural atmospheric dispersion and particulate settling (by gravity, rain or through contact with buildings and structures) prevent high dust concentrations from persisting in the ambient air.

The exposure point air concentration for target chemicals at off-site locations where a member of the public may inhale the chemical is conceptually made up of two components:

- The concentration of that chemical that is typically present in outdoor air unrelated to the dredging activities (i.e. the baseline ambient air concentration or "background") and
- The concentration of that chemical that due to the transport and dispersion of dust from the removal/stabilization operations.

The overall purposes of implementing an air monitoring and sampling program at the site is to:

- Establish background levels.
- Monitor and document perimeter ambient air levels of target COPCs.
- Screen results against human health concern levels
- Determine when to implement appropriate dust and/or odor control measures and/or amend best management practices (BMPs)

The potential to emit calculations requested by NJDEP showed that VOCs were below NJDEP permitting thresholds. Hydrogen sulfide has been monitored during all sediment collection activities conducted for many years and the levels have been below monitoring requirements. Nevertheless, real-time monitoring of VOCs and periodic monitoring for hydrogen sulfide will be conducted downwind of the dredging operations at RM 10.9. The hydrogen sulfide monitoring is more for odor control than for a health risk. Real-time monitoring and sampling for particulates (dust) will be conducted at specific fixed locations depending on wind direction surrounding the dredging operations at RM 10.9.

To be protective of the public, the total ambient concentrations of the target COPCs will be below an appropriate risk-based concentration threshold at the point of potential exposure. These thresholds may be chemical-specific concentration or concentration limits on total dust (particulates) that are established to be protective of a number of chemicals of dust assuming a subchronic short term exposure.

The air monitoring plan will consist of the following:

- real time monitoring of meteorological data to determine what areas are downwind of removal activities,
- real-time monitoring for volatile organic compounds (VOCs),
- monitoring of hydrogen sulfide (rotten egg smell),
- real-time monitoring of dust (particulates),
- 24-hour composite samples at downwind fixed locations for particulates (dust) to be analyzed for targeted COPCs that could potentially adhere to dust particles. Collected data will be posted on the project website and shared with EPA and NJDEP.



Air Monitoring Station

#### 4.8.1 VOC Monitoring

Air will be monitored in downwind locations of the dredging operations and stabilization facility to ensure that total VOC concentrations at the work zone perimeter do not exceed the air indicator criteria. Total VOCs of 10 parts per million above background levels has been established as action indicator criterion. To provide additional assurance, a lower investigation level of 5 ppm has also been established as the preliminary indicator criterion. Should the air monitors detect VOC concentrations exceeding the investigation level for a 15-minute period, the source of the emissions will be investigated and evaluated. Should the air monitors detect VOC concentrations exceeding the control level for a 15-minute period, mitigation measures will be implemented. If a 15-minute average of 10 ppm is exceeded because of dredging activities or the stabilization facility, work will be stopped until corrective measures are implemented. VOC monitoring equipment consists of photo-ionization detectors (PIDs) that measure total VOC concentrations continuously. The equipment logs real-time data and calculates a 15minute average.

#### 4.8.2 Hydrogen Sulfide and Dust Monitoring

Many sediment samples have been collected from the RM 10.9 area and the levels of hydrogen sulfide have been very low with odor barely noticeable. Sensitive receptors can smell the "rotten egg" odor of H2S at low concentrations in air 0.5 ppb (0.0005 ppm) and 90 percent of people can smell it at levels of 50 ppb (0.05 ppm). A ThermoGasTech 402 portable gas monitor or equivalent will be used to detect hydrogen sulfide.

Hydrogen sulfide monitoring will be conducted continuously at downwind locations from the dredging operations while dredging is occurring. If the hydrogen sulfide "preliminary indicator criterion" of 0.01 ppm is exceeded over a 15-minute period, the source of sulfide will be investigated. If the hydrogen sulfide "indicator criterion" of 0.02 ppm is exceeded over a 15-minute period, operations will be suspend until the hydrogen sulfide level returns to below the 1 ppm within 15-minute period or corrective measures are implemented, unless it can be demonstrated through investigation that dredging is not the cause of exceedance.

Particulate (Dust) Monitoring

Dust will be monitored to ensure that concentrations at downwind locations of the dredging operations remain below the air quality criteria. An air indicator criteria for dust of 450 µg/m3 above background levels has been established as the "indicator criterion" for the project. To provide additional assurance, a lower control level "preliminary indicator criterion" of  $100 \, \mu g/m^3$  above background levels has also been established. If this lower level is exceeded for a 15-minute period, the source of dust will be investigated. If the dust is from dredging operations mitigation measures will be implemented. If the "indicator criterion" is exceeded, and it is due to the

dredging/ stabilization operations, then on-site activities that generated the dust will be stopped and there will be a re-evaluation of the activities.

In addition to the real-time monitoring of dust, 24-hour composite samples of dust will be collected at fixed monitoring locations surrounding the dredging operations and analyzed for select COPCs. The results will be compared to human health risk based criteria.

#### 4.8.3 Barge Transport Monitoring

The barges used to transfer dredged sediment from RM 10.9 to the stabilization facility are part of the dredging operations and will be included in the air monitoring while at that location. The dredge material will be wet and may have a layer of water on top of it as the sediment settles to the bottom of the barge and residual water comes to the top. For this reason and as shown in the Potential to Emit calculations performed for NJDEP, emissions from the barged material will be low. The barges will remain at the Removal Area until they are ready for transport downriver to the stabilization facility. It is anticipated that barges full of dredged sediment will only be stationary for very short periods of time, less than an hour, during the trip from RM 10.9 to the stabilization facility preventing downwind impacts. Initial air monitoring will be conducted before the first trip from RM 10.9 to the stabilization facility to assess the barge transport impact.

# 4.9 Weather Monitoring

Weather during the removal project can impact the operations, navigational safety, and worker and community safety. Weather factors such as precipitation, wind, and thunderstorms can affect the project's implementation by restricting the work schedule, warranting extra precautions or necessitating temporary shutdown of operations. Conditions that would warrant limitation or shut down of operations will be laid out in the Construction Health and Safety Plan (Appendix F of Final Design). It is also important to know the wind direction throughout the construction day so that the air monitoring can always be conducted between the dredging operations and the downwind public.

There will be on-site meteorological data collections stations at both the RM 10.9 and the stabilization locations. Project personnel will have access to and routinely monitor other weather information sources such as climate data from the meteorological station at Newark Liberty International Airport. Current and predicted weather conditions will be compared to weather restrictions in the Construction Health and Safety Plan.

#### 4.9.1 Weather Mitigation Measures

As indicated previously weather factors can potentially affect the implementation of the project. Adverse weather can result in a temporary shutdown of the dredging/capping operations. Long range forecasts will be monitored for potential adverse weather. However, these is forecasts do not have the accuracy to effectively implement physical corrective measures.

The following site conditions/mitigation measures reduce the potential of significant weather related impacts to the project:

- Dredging operations are to be conducted during the historically low precipitation months of July and August which minimizes the potential for a significant rain event impacting the newly dredged surface
- The density of the sediment increases with depth and therefore has a low potential for erosion during a high flow event. This is further supported by the fact that the existing sediments surface was essentially unchanged after Hurricane Irene.
- Capping operations will begin as soon as practical after the completion of dredging activities to minimize the time that the newly dredge surface is exposed to potential high flow conditions.
- Dredging/capping operations will be shutdown when the river velocity exceeds the operational effectiveness
  of the silt curtain system. This velocity will vary with the silt curtain systems utilized but typically is

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approximately 2 knot (>6,000 cfs) which based on historical data has only occurred during a significant storm event such as Hurricane Irene. These high flow conditions will also likely result is excessive turbidity measurements at the water quality monitoring locations which would also shutdown marine operations.

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## 5 COMMUNITY QUALITY OF LIFE CONSIDERATIONS

The "quality of life" in a community is difficult to define but the CPG understands that excessive light, noise, and odor can be a nuisance and disruptive to the enjoyment of private property and public neighborhoods. As a consequence, the CPG has considered these potential quality of life factors in planning the RM 10.9 Removal Action. This section describes the factors and measures to mitigate potential impacts.

# 5.1 Lighting

It is not anticipated that lighting that will affect the local community either at RM 10.9 or at the stabilization facility because the majority of the work will be performed during daylight hours from approximately sunrise to

dusk. During early morning or evening work on cloudy days there may be minimal lighting on vessels and equipment on the river to allow for safe work conditions. The lighting will be focused lighting for the task at hand and not diffuse large area lighting.

Project lighting is not expected to affect the community because night-time operations are expected to be minimal.

The transportation of barges may occur during the night hours and require lighting directed toward the river to allow for safe navigation. It is not expected that this lighting will have an effect the local community.

Under one unlikely project scenario, increased lighting may be required for night time operations. If the project schedule slips substantially (e.g. adverse weather for long periods), night time work may be required to complete the project during the 2013 construction season. If this situation occurs, every effort will be made to implement lighting that is focused on the river and not toward the local community.

#### 5.2 Noise

#### 5.2.1 Dredging and Barging

All dredging activities will be conducted to be compliant with maximum noise contribution limits established for the project. NJAC 7:29 is considered a relevant and appropriate requirement, although this activity does not fit the definition of a regulated activity under that rule. The noise levels

established for this project are provided in Table 5-1.

TABLE 5-1

Noise Limits

RM 10.9 Pre-Final Design Report, Lower Passaic River Study Area, New Jersey

Noise levels are expected to be below local regulatory levels but will be monitored and preventative measures will be taken to insure acceptable levels.

Noise Level Monitoring Station	Location	Daytime (maximum hourly average)	Evening (maximum hourly average)
1	North perimeter 100 ft upstream of removal area on east shore	75 dBA	65 dBA
2	South perimeter 100 ft downstream of removal area on east shore	75 dBA	65 dBA
3	Center perimeter of removal area on east shore	75 dBA	65 dBA

Day is defined as the period from 7:00 a.m. to 6:00 p.m., Monday to Saturday; evening is defined as the period from 6:00 p.m. to 10:00 p.m. At no time on Sundays or public holidays.

A large excavator, similar to the equipment likely to be used for dredging, has a sound intensity of 97 decibels (dB) at 2 feet. At a distance of 128 feet the sound will dissipate to less than the residential property boundary regulatory limit for evenings of 65 dB. During dredging and capping the excavator will be the closest equipment to the shore; all other support vessels will be further away.

Exceedence of these noise limits Table 5-1 is not expected to be a major concern because: 1) the nearest dredging to a residential area is at the northern end of the removal area where dredging will occur greater than 128 feet away; and 2 )no blasting or installation of sheet piles is required as part of dredging operations. The following specific precautionary measures will be implemented to insure that site activities do not result in a quality of life noise concern:

- Equipment Maintenance. All equipment will be operated and maintained in a proper and efficient manner to reduce the potential for noise and other issues;
- Preventative Equipment Evaluation. Daily prestart equipment inspections will be undertaken and include
  inspection of key noise attenuation devices (e.g., mufflers); any defects that are reported will be scheduled
  for repair.

As a precaution, noise monitoring will be conducted in the park periodically to ensure that the dredging operations are not exceeding the noise level limits.

# 5.2.2 Capping

The capping equipment used for the RM10.9 Removal Action will be similar to the equipment used for dredging and transport. Consequently, the noise mitigation and monitoring program defined for dredging and barging will be also conducted throughout the capping phase of the program.

#### 5.3 Odor

Odor is somewhat related to the air monitoring in Section 4 except that odor is more of nuisance and does not necessarily mean there is potential health impact to the public. Since it is a more of nuisance it is included in the quality of life monitoring. The air monitoring proposed in Section 4 is to make sure that no impacts to the public from air emissions during the Removal Action are a health risk.

The COPCs contained within the sediment that will be dredged generally do not have odors at the concentrations found within the sediment. Another odor that is sometimes associated with sediments is that of hydrogen sulfide, the rotten egg smell. All natural occurring sediment/dirt will have some odor to it due to the naturally organic matter (decaying leaves, aquatic plants etc.) that have been buried with it. Many sediment samples have been collected from the RM 10.9 area and the levels of hydrogen sulfide have been very low and hardly noticeable. It is possible that while digging up a larger amount of sediment as compared to a sediment core there may be some hydrogen sulfide odor. As specified in the air monitoring section, there will be monitoring for hydrogen sulfide.

The CPG will monitor odor and conduct real-time air monitoring in the park and other areas adjacent to the dredging operations when conditions are appropriate (i.e. when the park or other adjacent areas are downwind of the operations). The results of the real-time air monitoring and odor monitoring will be documented daily and made available on the CPG's website.

If a member of the public has a complaint relating to odor, the complaint will be document and a representative from the CPG contractor will investigate the odor. The first step will be to conduct real-time monitoring of the odor including hydrogen sulfide. If any of the real-time monitoring parameters exceed acceptable levels then the source of the odor will be investigated and if it is related to the Removal Action mitigation measures will be implemented. If the odor does not exceed the acceptable air monitoring levels, it will still be determined if the odor is Removal Action related. If the odor is project related and the odor is sustainable and at a level that impacts the quality of life, then there will be an attempt to mitigate the odor.

All steps in this process will be documented by the on-site representative of the CPG's General Contractor.

# 6 PUBLIC COMMUNICATION

Public communication and participation activities for the LPRSA are outlined in both the 2006 multi-agency Community Involvement Plan and the EPA's November 2008 Draft Community Involvement Plan. This section outlines public communication and participation activities that are relevant to the RM 10.9 Removal Action. The objective of these specific activities will be to insure that the public has access to and communication from the Project Management of the RM 10.9 Removal Action.

#### 6.1 On-Line Websites

There are several websites that provide information on the LPRSA, however, the official project website maintained by EPA is the website www.ourpassaic.org. During the RM10.9 Removal Action, weekly progress reports of the sediment removal and cap placement activities will be posted on the CPG's website www.rm109.com.

# 6.2 Community Advisory Group

The LPR Community Advisory Group (CAG) was established in 2009 to ensure that public communication on the LPRSA and the Passaic River environmental health as a whole. The CAG's role is to advise the US Environmental Protection Agency on the clean up of the Lower Passaic River. The CAG Addresses concerns about "keeping the project moving", advises the EPA on the clean up of the lower Passaic River and provides a forum for coordination with partner agencies, interest groups, and municipalities on such issues as land restoration and redevelopment. The CAG consists of members of the local community, local municipal leaders, local business owners, representatives of various civic organizations and some representatives of regulatory agencies. The CAG holds regular meetings that are open to the public and posted on the www.ourpassaic.org website.

#### 6.3 Contact List and Email.

EPA maintains a list of project representatives, official and stakeholders in the cleanup of the LPRSA. Section 7 provides the most resent contact list with addresses, phone numbers and emails for the Government project team, the CAG and local, State and Federal officials having jurisdiction for the site location. In addition, a project-specific email and hotline has been established. The email and hotline information is provided below. The actions that will be taken in response to communication by either email or hotline inquiries is presented in Section 5.4.

# 6.4 Community Hotline and Investigation Response Program

A multi-step process will be followed when EPA receives a general inquiry or complaint about quality of life concerns related to the Removal Action. An inquiry or complaint is made through the project website, e-mail, or by calling the hotline (hotline phone numbers will be established, tested, and communicated to the public prior to initiation of construction and operations activities). When an inquiry or quality of life complaint is received, it will be promptly acknowledged, and the process described below will be followed to investigate and respond to each inquiry. The goal of EPA is to respond to each inquiry and complaint within two or three days of receipt.

# 6.4.1 Listen

The first step of the process is to record and listen to the complaint if telephoned to the hotline or read if emailed. A determination will be made as to the emergency status of the call or email. The auto-reply email and voicemail instructions (or operator) will direct the person to immediately call 911 if they are witnessing or are aware of an emergency of a magnitude or severity warranting immediate response by local emergency services such as fire department, police, or ambulance. The auto-reply email and voicemail greeting will also include a "thank you" for the inquiry or complaint and prompt the person to provide details sufficient to explain the nature of their question or specifics regarding the location, time, and type of complaint they believe may be project related. They are also asked to provide contact information so they can be contacted if follow-up clarification is needed and again later when the response is ready to be communicated.

EPA's goal is to respond to all inquires within two to three days. However, prompt action will be taken

immediately upon receipt of each inquiry or complaint. Thus, each call, voicemail message, and email is immediately relayed to the EPA Community Liaison so that investigation and response can begin without delay. In some cases, EPA may need to contact the person immediately to collect additional information or clarify details so that an effective investigation and response can be implemented. For example, EPA may reply immediately if a voicemail message or email lacks specific information about the general question being asked or important details about the apparent source/cause of complaint about noise, light, odor, traffic, or disruption to navigation. After notification (and clarification if needed), the EPA Community Liaison (with support from the On-Scene Coordinator, EPA, and CPG representatives as needed) will determine initial next steps, which are described below. All inquiries to EPA program will be recorded on logs, including response and response times.

## 6.4.2 Evaluate

The next step is to evaluate each inquiry to determine if it is a general question to be addressed directly by EPA or a quality of life complaint to be investigated in the field by the CPG and its contractors (in cooperation with and under the oversight of EPA).

If the inquiry is a general question or information request about project status, remedial process, or other general needs, the EPA Community Liaison will gather the necessary information from the project team to fulfill the request. When the question or request is answered, the EPA Community Liaison will call or email the person to convey the information. That response information may include suggestions for other sources of information or assistance via various community-based organizations and resources.

If the call, voicemail message, or email describes a specific complaint about noise, light, odor, traffic, or navigation, the EPA On-Scene Coordinator will be notified. If the cause of the complaint or quality of life concern is already known or can be easily identified and resolved, the On-Scene Coordinator will notify the EPA Community Liaison so the Liaison can in turn respond to the community member about the complaint or concern. If the cause of the complaint or concern is not known and needs investigation, the On-Scene Coordinator will notify the Site Supervisor to determine if the cause appears to be project-related and, if so, to pursue additional investigation activities described below.

#### 6.4.3 Investigate

An early objective in the investigation process is to determine if the apparent impact is directly related to project operations or caused instead by an off-site source or activity on neighboring property or in the vicinity of work areas. Another important factor considered during this early stage of the investigation is what types of activities were occurring in the project work areas or along truck routes, and how that information aligns with the reported nature, time, and location of the complaint.

If the initial investigation reveals that the source of the apparent impact is not project related, the EPA Community Liaison will be notified. EPA will then call or email the person who submitted the complaint, explain the findings of the investigation, and thank the person for their inquiry and interest in the project. Results are also recorded in a log to track complaints and over time look for trends or patterns that may assist in subsequent investigations.

For sources that are determined to be project related, the project team will evaluate the cause and then consider what form of response may be warranted. Project-related impacts could be generated from normal operations such as increased traffic along the truck routes, from temporary conditions such as operations extending past normal working hours to meet a deadline (generating a light complaint), or from natural causes such as increased odors due to variations in heat, humidity, and wind direction or speed. With these operations considerations in mind, the next steps in the investigation would include review of monitoring data available that are relevant to the location, time, and type of complaint. Those data and available information about operational activities would be compared to details from the complaint to help confirm that the source/cause is project related and to guide next steps in determining possible mitigation measures or changes in operational procedures to address the complaint and prevent recurrence of similar conditions generating such complaints. If the operational conditions apparently generating the complaint are brief, temporary, or unavoidable perhaps no further action is needed. If

 however there are opportunities or a need to consider and implement mitigation measures or other corrective action, those decisions are made in consultation with EPA.

#### 6.4.4 Respond

The Site Supervisor in consultation with the Oversight Engineer and the EPA and others on the project team will identify and implement the appropriate corrective action or other response. This could take the form of waiting for weather conditions to change, modifying worker behavior or practices, adjusting operating procedures, increased monitoring, or potential changes or modifications in equipment. Depending on the type of complaint and the severity or expected duration (temporary or persistent) of the condition, corrective actions selected will be those that are effective yet practical and cost-efficient, are reasonable and feasible to implement, and do not have a significant adverse impact on project schedule or the ability to achieve the Removal Action objectives and other EPA requirements. The project team also will consider additional preventive measures to reduce the possibility of the condition to recur. If it is not feasible to prevent a recurrence, measures may be considered to mitigate the source and cause, to the extent practicable.

Note that some sources/causes may be so brief and temporary (odor on a windy day) that they may be naturally resolve before corrective actions are needed. There may also be instances when the project team is aware of a problem and has implemented a corrective action just prior to receipt of a complaint.

After a complaint investigation is complete and corrective or mitigative measures have been initiated or implemented, the CPG will record all pertinent information on logs and provide EPA summary descriptions of the complaint, investigation findings, and outcomes, including information about the identified source, the evaluation of causes, and the appropriate response selected and implemented. This will be completed for each individual complaint, and those data aggregated into weekly summaries suitable for distribution to the CAG and general public via the project website. Included in that reporting will be a summary of air and water quality exceedances, if any, and the corrective actions taken to return conditions to within the regulatory requirements. To protect the privacy of individuals, no personal contact information would accompany summaries made publicly available. Note that weekly progress summaries will be written and posted to the project website during sediment removal activities.

The final step is for the EPA Community Liaison to call or email the person that submitted the complaint to explain the results of the investigation and what steps were taken to address the source/cause for the complaint. In some cases the response will include explanation of what additional measures were taken to prevent a recurrence or to mitigate the impacts if recurrence is unavoidable. EPA's goal is to respond with this summary information within two or three days of the person's initial inquiry.

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# 7 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

Preparedness involves the assessment, prevention, response and compliance of site conditions that may result in potential accidents and the creation of emergencies. Emergency preparedness and response planning is the responsibility of all of the individuals involved with implementation of the RM 10.9 Removal Action. Preparedness includes review and compliance of safe work conditions and approaches with governing regulations including the U.S. Occupational Safety and Health Administration (OSHA), the U.S. Coast Guard as well as oversight environmental agencies. As with health and safety monitoring, emergency preparedness will be primarily the responsibility of the Contractor and the Oversight Engineer. Consequently, the Contractor HASP will detail preparedness measures for construction-related operations. This section primarily addresses emergency preparedness and response planning for on-site personnel as the prevention of accidents on site has is the best protection against emergencies that may affect the community at large.

# 7.1 Site Safety Personnel

Safe working requirements for workers are issued by OSHA and the Contractor will have the sole responsibility of insuring that work means and methods are compliant with those requirements. The OSHA requirements, however, do not detail potential hazards associated with each task that must be performed in order to conduct the operation; therefore, safety is insured only through creation of task hazard analyses. Task hazard analyses for construction operations will be prepared by the Contractor and issued as part of the Contractor HASP. The Oversight Engineer will both review the Contractor-prepared plan and generate hazard analyses associated with activities it will be conducting. Through advanced planning and consideration of potential hazards that may arise, safe work practices will be insured and the prevention of serious accidents and/or injuries will be achieved.

Site safety personnel for the RM10.9 Removal Action primarily involved with implementing the HASP are the Project Manager, the Site Supervisor and Site Health and Safety Officer from both the Contractor and Oversight Engineer. The role each has with regard to site health and safety is detailed in this section.

#### 7.1.1 Project Manager

The Project Manager is not on site on a day to day basis but has the overall responsibility for insuring that site operations proceed in a safe manner. The Project Manager will receive regular updates from both the Site Supervisor and the Site Health and Safety Officer and has the responsibility of insuring that these on-site individuals have the means and methods to insure that the work is carried out in a safe manner. Any near miss reports or other safety-related issues must be investigated thoroughly and it is the responsibility of the Project Manager to insure that the process is completed and incident reports are filed.

#### 7.1.2 Site Supervisor

The Site Supervisor is responsible for making sure the day to day operations proceed safely and according to construction plans and schedules. The Site Supervisor must insure that the Contractor HASP is implemented on site and all personnel have the knowledge and equipment needed to be compliant with the plan. This review includes verifying all on-site personnel have the requisite training for performing assigned tasks safely. The Site Supervisor has the responsibility of observing work performed by all on-site personnel and correcting any unsafe work habits. The Site Supervisor must insure that a copy of the HASP is available on site and the critical elements of it including emergency numbers and directions to the hospital are posted.

Each on-site personnel must undergo site hazard awareness training. While this training is the responsibility of the Site Health and Safety Officer, the Site Supervisor should be able to conduct the training in the event the Site Officer is not available. The Site Supervisor is also responsible for assisting the Project Manager with follow up related to incident report investigations and data gathering.

#### 7.1.3 Site Health and Safety Officer

The Site Health and Safety Officer is responsible for the on-site personnel are trained to carry out construction activities in a healthy and safe manner. The Safety Officer has primary responsibility for conducting on-site

training and daily safety tailgate meetings and debriefings. Any modifications to the HASP as the result of incident reports will be made by the Safety Officer and updated in the on-site copy of the plan.

All personal air monitoring and screening will be conducted by the Safety Officer or his designee. The results of the monitoring will be used to determine if any changes in personal protective equipment is warranted. The Safety Officer has the responsibility of not only conducting the monitoring but documenting the results and any action taken. The Site Safety Officer must assist the Site Supervisor with generating information needed to close out an incident report.

# 7.2 Visitor Safety

Through maintaining safe on-site work practices, the greater community will be protected from serious environmental impacts associated with the RM 10.9 Removal Action. Visitors to the RM10.9 site, however, will have to be oriented to the site, ongoing work activities and associated risks and emergency procedures. This orientation will be provided by the Contractor's Project Manager or Site Health and Safety Officer. Visitors to the site must be prescheduled through the Project Contacts provided in Section 7.1 and arrangements must be made for the safety orientation. During pre-scheduling visitors will be provided a list of personal safety gear which must be provided by the individual unless otherwise arranged by the Contractor and provided at the time of the site safety briefing.

Part of the safety orientation will include review of the HASP and acknowledgement that the visitor is responsible for abiding by the safe behavior requirements stated therein. The Contractor may decide to preclude visitors to the site who don't abide by the HASP and exhibit risky behavior. The Contractor may also decide that there are work activities which are inherently risky and may be observed only at a safe distance. Finally, there is an onwater component of the work activities which requires boat safety awareness training. Unless visitors have gone through worker safety training for work activities in and around the water, the visitor will not be allowed near the water edge.

# 7.3 Spill Prevention and Response

A spill response plan will be implemented for the containment, cleanup and removal of any oil spills and other oil releases that may occur as a result of project activities. Response measures implemented will be monitored and assessed for effectiveness in controlling the pollution event and likelihood of preventing a repeatable event.

As part of this spill response plan, mobile spill response kits will be available on all marine vessels, at the river-to-land unloading location(s), adjacent to the sediment stockpiling area, and in required site vehicles. The spill kits will include the following:

- 50 pads Bale Oil HD (or equivalent)
- 1 Pillow Oil HD (or equivalent)
- 6 Boom Oil K-Sorb (or equivalent)
- 50 lbs of FloorSweep (or equivalent)
- 10 bag disposal units
- 1 plug and dike unit

In the event of a significant release of oil/fuel or other pollutant into the river, these steps will be followed:

- The affected area will first be made safe and secure.
- Operations will be suspended, and any potential for further spills will be prevented (where possible), and the existing spill contained.
- Recovery and clean up of the contaminant will be undertaken.
- Relevant statutory authorities, including the EPA and NJDEP, will be notified, as will nearby and/or downstream stakeholders who may be affected.
  - To report environmental incident in NJ, call 24-Hour Environmental Incident Hotline: 1-877-927-6337 (1-

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#### 877-WARNDEP)

- EPA Superfund—Emergency Response
- National Response Center: 1-800- 424-8802
- New Jersey Department of Environmental Protection (NJDEP)—Site Remediation and Waste Management Emergency Response, NJ Office of Emergency Management

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# 8.1 Project Contacts

# **CPG Project Coordinator**

186 Center Street, Suite 290

Clinton, NJ 08809

Contact: Willard Potter Phone: (908) 735-9315

e-mail: otto@demaximis.com

Contact: Robert Law Phone: (215) 806-7688

e-mail: rlaw@demaximis.com

Contact: Stan Kaczmarek Phone: (973) 978-9621

e-mail: stank@demaximis.com

r madison street Rutherford, NJ 07073

# United States Environmental Protection Agency Region 2

290 Broadway

New York, NY 10007-1866 Contact: Stephanie Vaughn Phone: (877) 251-4575

e-mail: vaughn.stephanie@epa.gov

# National Oceanic and Atmospheric Administration National Ocean Service-Office of Response and Restoration

290 Broadway

New York, NY 10007-1866 Contact: Reyhan Mehran Phone: (212) 637-3257

e-mail: reyhan.mehran@noaa.gov

# U.S. Fish and Wildlife Service New Jersey Field Office-Ecological Services

927 North Main Street, Building D Pleasantville, NJ 08232

Contact: Tim Kubiak

Phone: (609) 646-9310 ext. 26 e-mail: <a href="mailto:tim-kubiak@fws.gov">tim-kubiak@fws.gov</a>

#### **CPG Contractor**

CH2M HILL 119 Cherry Hill Road Parsippany, NJ

Contact: Roger McCready Phone: (937) 672-1629

e-mail: roger.mccready@ch2m.com

Contact: Gary Foster Phone: (678) 488-5989

e-mail: gary.foster@ch2m.com

# U.S. Army Corps of Engineers Programs & Project Management Division

26 Federal Plaza - Room 2119 New York, NY 10278-0090 Contact: Lisa A. Baron Phone: (917) 790-8306

e-mail: Lisa.A.Baron@usace.army.mil

# New Jersey Department of Environmental Protection

#### **Site Remediation Program**

401 E. State Street 6th Floor, East Wing PO Box 028

Trenton, NJ 08625

Contact: Janine MacGregor Phone: (609) 633-0784

e-mail: Janine.MacGregor@dep.state.nj.us

# 8.2 Community Advisory Group

The Passaic River Community Advisory Group (CAG) provides advice and recommendations to the Environmental Protection Agency and its Partner Agencies to help ensure a more effective and timely cleanup and restoration of the Passaic River. The CAG consists of stakeholders who represent a broad range of interests and locales potentially affected by the contamination and cleanup of the Passaic River Superfund site.

#### The CAG Chairs are:

Ana Baptista Debbie Mans 973-817-7013 x217 732-888-9870

abaptista@ironboundcc.org debbie@nynjbaykeeper.org

#### 8.3 Elected Officials from the Federal and State Government

8.3.1 Elected Officials - Federal (updated as of February 2013)

8.3.1.1 U.S. Senate

#### Senator Frank R. Lautenberg

Washington, D.C. Office Senate Hart Office Building

Suite 324

Washington, D.C. 20510 Phone: (202) 224-3224 Fax: (202) 228-4054

Web: www.lautenberg.senate.gov

**Newark District Office** 

One Gateway Center, 23rd Floor

Newark, NJ 07102 Phone: (973) 639-8700 Toll Free: (888) 398-1642

Fax: (973) 639-8723

Camden District Office One Port Center

2 Riverside Dr., Suite 505 Camden, NJ 08101

Phone: (856) 338-8922 Fax: (856) 338-8936

#### **Senator Robert Menendez**

Washington, D.C. Office Hart Senate Office Building

Suite 528

Washington, D.C. 20510 Phone: (202) 224-4744 Fax: (202) 228-2197

Web: www.menendez.senate.gov

**Newark District Office** 

One Gateway Center, Suite 1100

Newark, NJ 07102 Phone: (973) 645-3030

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Fax: (973) 645-0502

Barrington District Office 208 White Horse Pike, Suite 18

Barrington, NJ 08007 Phone: (856) 757-5353 Fax: (856) 546-1526

8.3.1.3 U.S. House of Representatives

#### Rep. Scott Garrett

83 Spring Street, Suite 302A

Newton, NJ 07860 Phone: (973) 300-2000 Fax: (973) 300-1051

2232 Rayburn HOB Washington, DC 20515 Phone: (202) 225-4465 Fax: (202) 225-9048

#### Rep. Albio Sires

Washington, DC Office 2342 Rayburn HOB Washington, DC 20515

Phone: (202) 225-7919 Fax: (202) 226-0792

Elizabeth Office 800 Anna Street Elizabeth, NJ 07201 Phone: (908) 820-0692 Fax: (908) 820-0694

West New York Office

5500 Palisade Avenue Suite A West New York, NJ 07093 Phone: (201) 558-0800

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Fax: (201) 617-2809

**Bayonne Office** 

630 Avenue C, Room 9 Bayonne, NJ 07002 Phone: (201) 823-2900

Fax: (201) 858-7139

Jersey City Office

121 Newark Avenue, Suite 200

Jersey City, NJ 07302 Phone: (201) 309-0301 Fax: (201) 309-0384

#### Rep. Bill Pascrell

Washington, DC Office

2370 Rayburn House Office Building

Washington, D.C. 20515 Phone: (202) 225-5751 Fax: (202) 225-5782

Paterson Office

Robert A. Roe Federal Building 200 Federal Plaza, Suite 500

Paterson, NJ 07505 Phone: (973) 523-5152 Fax: (973) 523-0637

#### Rep. Donald M. Payne Jr.

Washington, DC Office

103 Cannon House Office Building

Washington, DC 20515 Phone: (202) 225-3436 Fax: (202) 225-4160

Jersey City Office

253 Martin Luther King Drive

Jersey City, NJ 07305 Phone: (201)-369-0392 Fax: (201)-369-0395

**Newark Office** 

60 Nelson Place, 14th Floor (LeRoy F. Smith, Jr.

Public Safety Building) Newark, NJ 07102 Phone: (973)-645-3213

Fax: (973)-645-5902

#### Rep. Rodney Frelinghuysen

Washington, DC Office 2306 Rayburn House Office Building Washington, DC 20515-3011 (202) 225-5034

Morristown Office

30 Schuyler Place, Second Floor Morristown, NJ 07960

(973) 984-0711

8.3.2 Elected Officials - State (updated as of January 2013)

8.3.2.1 New Jersey State Senate

#### District 20:

Sen. Raymond J. Lesniak 985 Stuyvesaant Ave. Union, NJ 07083 Phone: (908) 624-0880

65 Jefferson Avenue, Suite B Elizabeth, NJ 07201-2474 Phone: (908) 327-9119

#### District 28:

Sen. Ronald L. Rice 1044 South Orange Ave. Newark, NJ 07106 Phone: (973) 371-5665

#### District 29:

Sen. M. Teresa Ruiz 166 Bloomfield Ave. Newark NJ 07104 Phone: (973) 484-1000

#### District 31:

Sen. Sandra B. Cunningham 1738 Kennedy Blvd. Jersey City, NJ 07305 Phone: (201) 451-5100 Fax: (201) 451-0867

#### District 32:

Sen. Nicholas J. Sacco 9060 Palisade Ave. North Bergen, NJ 07047 Phone: (201) 295-0200

8.3.2.2 New Jersey State Assembly

#### District 20:

Assemblyman Joseph Cryan 985 Stuyvesaant Ave. Union, NJ 07083

Phone: (908) 624-0880

65 Jefferson Avenue, Suite B Elizabeth, NJ 07201-2474 Phone: (908) 327-9119

Assemblywoman Annette Quijano 985 Stuyvesaant Ave. Union, NJ 07083

Phone: (908) 624-0880

65 Jefferson Avenue, Suite B Elizabeth, NJ 07201-2474 Phone: (908) 327-9119

#### District 28:

Assemblyman Ralph R. Caputo

148-152 Franklin St. Belleville, NJ 07109 Phone: (973) 450-0484

Assemblywoman Cleopatra G. Tucker

400 Lyons Ave. Newark, NJ 07102 Phone: (973) 926-4320

#### District 29:

Assemblyman Albert Coutinho

73-75 Ferry St. Newark, NJ 07105 Phone: (973) 589-0713

Assemblywoman L. Grace Spencer

223 Hawthorne Ave. Newark, NJ 07112 Phone: (973) 624-1730

#### **District 33:**

Sen. Brian P. Stack 411 Palisades Ave.

Jersey City, NJ 07307-1617 Phone: (201) 721-5263

#### District 31:

Assemblyman Charles Mainor 2324 Kennedy Boulevard Jersey City, NJ 07304-1531 Phone: (201) 536-7851

Assemblyman Jason O'Donnell

447 Broadway Bayonne, NJ 07022 Phone: (201) 436-0961

#### District 32:

Assemblyman Vincent Prieto 1249 Paterson Plank Rd. Secaucus, NJ 07094 Phone: (201) 770-1303

Assemblywoman Angelica M. Jimenez 5600 Kennedy Boulevard, Suite 104 West New York, NJ 07093-1256

Phone: (201) 223-4247

#### District 33:

Assemblyman Ruben J. Ramos, Jr. ES020413051928DAY

70 Hudson St., 7th Floor Hoboken, NJ 07030 Phone: (201) 714-4960

Assemblyman Sean Connors 3521 Kennedy Boulevard Jersey City, NJ 07307-4124 Phone: (201) 795-9190 8.3.3 Local Officials

(updated as of January 2013)

8.3.3.1 County Contacts

#### **Essex County**

Joseph N. DiVincenzo, Jr., Essex County Executive Hall of Records Room 405

465 Dr. Martin Luther King, Jr. Blvd.

Newark, NJ 07102 Phone: (973) 621-4400 Fax: (973) 621-6343

Michael Festa, Ph.D., Essex County Health Officer

**Essex County Health Department** 

115 Clifton Ave. Newark, NJ 07104 Phone: (973) 497-9401 Fax: (973) 497-9407

e-mail: ecdohceha@admin.essexcountynj.org

Tara M. Casella, Environmental Coordinator Essex County Environmental Center, Office of

Environmental Affairs 621-B Eagle Rock Ave. Roseland, NJ 07060 Phone: (973) 228-8776 Fax: (973) 228-3793

e-mail: tcasella@parks.essexcountynj.org

#### **Passaic County**

Anthony DeNova, County Administrator 401 Grand Street

Paterson, NJ 07505 Phone: (973) 881-4405

e-mail: adenova@passaiccountynj.org

#### **Bergen County**

Kathleen Donovan, County Executive

One Bergen County Plaza

Floor 5, Room 580 Hackensack, NJ 07601 Phone: (201) 336-7300

e-mail: countyexecutive@co.bergen.nj.us

rkistner@co.bergen.nj.us ETrawinski@co.bergen.nj.us

#### **Hudson County**

Thomas DeGise, County Executive

583 Newark Avenue Jersey City, NJ 07306 Phone: (201) 795-6200 e-mail: pobrien@hcnj.us

8.3.3.2 Municipal Contacts

#### Belleville

Raymond Kimble, Mayor 152 Washington Avenue Belleville, NJ 07109 Phone: (973) 450-3310

e-mail: kesposito@bellevillenj.net

#### City of Newark

Cory Booker, Mayor 920 Broad Street Newark, NJ 07102 Phone: (973) 733-6400

e-mail: zipkina@ci.newark.nj.us

#### **East Newark**

Joseph R. Smith, Mayor, Borough of East Newark

Borough Hall 34 Sherman Ave. East Newark, NJ 07029

Phone: (973) 481-2902 ext.226

Fax: (973) 481-0627

e-mail: jsmith eastnewark@verizon.net

#### **East Rutherford**

James Cassella, Mayor 1 Everett Place East East Rutherford, NJ 07073 Phone: (201) 933-3444

e-mail: Dmicci@eastrutherfordnj.net

#### Elizabeth

J. Christian (Chris) Bollwage, MayorElizabeth City Hall50 Winfield Scott Plaza

Elizabeth, NJ 07201 Phone: (908) 820-4171 Fax: (908) 820-0130

Krishna H. Garlic, Director Health Department Elizabeth City Hall 50 Winfield Scott Plaza Elizabeth, NJ 07201-2462 Phone: (908) 820-4049 Fax: (908) 820-4290

#### **Elmwood Park**

Richard Mola, Mayor 182 Market Street Elmwood Park, NJ 07407

Phone: (201) 796-1833

e-mail: rmola@elmwoodpark.nj.us

#### Garfield

Joe Delaney, Mayor 111 Outwater Lane Garfield, NJ 07026 Phone: (973) 340-2000

e-mail: garfieldclerk@optonline.net

#### **Hudson County**

Thomas DeGise, Hudson County Executive

**Brennan Court House Building** 

583 Newark Ave. Jersey City, NJ 07306 Phone: (201) 795-6200 Fax: (201) 795-6520

Carol Ann Wilson, Director

Department of Health & Human Services

Meadowview Campus 595 County Ave. Secaucus, NJ 07094 Phone: (201) 271-4310 e-mail: cwilson@hcnj.org

#### Harrison

Raymond J. McDonough, Mayor, Town of Harrison

Town Hall

318 Harrison Ave. Harrison, NJ 07029 Phone: (973) 268-2425

Fax: (201) 482-2101

e-mail: pjzarbetski@townofharrison.com

Richard J. Censullo, Health Officer Harrison Health Department

326 Harrison Ave.

Harrison, NJ 07029-1752 Phone: (973) 268-2441 Fax: (973) 482-2924

#### **Jersey City**

City Hall

Jerramiah T. Healy, Mayor, City of Jersey City

280 Grove St. Jersey City, NJ 07302

Phone: (201) 547-5150 Fax: (201) 547-4288/5442 e-mail: MayorHealy@jcnj.org

Harry Melendez, Director

Jersey City Department of Health & Human

1 Journal Square Plaza, Second Floor

Jersey City, NJ 07306 Phone: (201) 547-6800 Fax: (201) 547-5168

## Kearny

Alberto G. Santos, Mayor, Town of Kearny

Town Hall 402 Kearny Ave. Kearny, NJ 07032 Phone: (201) 955-7400 Fax: 201-998-6069

e-mail: mayor@kearnynj.org

John P. Sarnas, M.A., Health Officer Kearny Department of Health

645 Kearny Ave.

Kearny, NJ 07032-2998 Phone: (201) 997-0600 Fax: (201) 997-9703

e-mail: jsarnas@kearnynj.org

#### Lyndhurst

Robert B. Giangeruso, Mauor 367 Valley Brook Avenue Lyndhurst, NJ 07071 Phone: (201) 804-2457

e-mail: AmeliaJ@lyndhurstnj.org

theresaC@lyndhurst.org

#### Newark

Cory A. Booker, Mayor, City of Newark City Hall Room 200

920 Broad St. Newark, NJ 07102

Fax: (973) 733-5325

Phone: (973) 7 33-6400

Marsha McGowan, M.P.H., M.A., Manager of Surveillance and Prevention and Health Officer Newark Department of Health & Human Services,

Division of Surveillance and Prevention

110 William St.

Newark, NJ 07102-1316 Phone: (973) 733-7592 Fax: (973) 733-5614

e-mail: mcgowanm@ci.newark.nj.us

Augusto Amador, East Ward Councilman

Newark Municipal Council

920 Broad St. Newark, NJ 07102 Phone: (973) 733-3665

Kim Gaddy, Commission Chair

City of Newark Environmental Commission

920 Broad St. Newark, NJ 07102

e-mail:

http://www.ci.newark.nj.us/residents/green newark/

newark environmental commission.php

Clean Ocean Action

Cindy Zipf, Executive Director 18 Hartshorne Dr., Suite 2 Sandy Hook, NJ 07732 Phone: (732) 872-0111 Fax: (732) 872-8041

Cooperating Parties Group -

Lower Passaic River Restoration Project

De Maximis, Inc.

Bill Potter

186 Center St., Suite 290

Clinton, NJ 08809 Phone: (908) 735-9315 Fax: (908) 735-2132

e-mail: otto@demaximis.com

Kirkpatrick & Lockhart, LLP William H. Hyatt, Jr., Esquire One Newark Center, Tenth Floor

Newark, NJ 07102-5285 Phone: (973) 848-4000 Fax: (973) 848-4001

Jaffe Communications, Inc.

Jonathan Jaffe 200 North Ave. East Cranford, NJ 07016

Phone: (908) 276-6500, 789-0700

Fax: (908) 292-1177

#### **North Arlington**

Pete Massa, Mayor 3 Legion Place

North Arlington, NJ 07031 Phone: (201) 997-9364 e-mail: <a href="mailto:twall@comcast.net">twall@comcast.net</a> pmassa38@verizon.net

#### Nutley

Mayor

1 Kennedy Drive Nutley, NJ 07110 Phone: (973) 284-4951

e-mail: <u>majorpetracco@nutleynj.org</u> <u>commissionerrodgers@nutley.org</u>

#### **Passaic**

Alex D. Bianco, Mayor 330 Passaic Street Passaic, NJ 07055 Phone: (973) 365-5510

e-mail: rfernandez@cityofpassaicnj.gov

#### Rutherford

Joe DeSalvo, Mayor 176 Park Avenue Rutherford, NJ 07070 Phone: (201) 460-3022

e-mail: jdesalvo@rutherford-nj.com

cgallo@rutherford-nj.com

#### Wallington

Walter Wargacki, Mayor 24 Union Boulevard Wallington, NJ 07057 Phone: (973) 777-0318

e-mail: v.baginski@verizon.net

8.3.4 Stakeholder Groups

Association of New Jersey Environmental

Commissions (ANJEC)

Sandy Batty, Executive Director

PO Box 157

Mendham, NJ 07945 Phone: (973) 539-7547 Fax: (973) 539-7713 e-mail: sbatty@anjec.org

Bloomfield Third Riverbank Association

Mary Shaughnessy 41 Lowell Terrace Bloomfield, NJ 07003 Phone: (973)338-5127 e-mail: ellanora@comcast.net

# Field Office (paddling center & most eco-cruises):

Laurel Hill County Park End of New County Road Secaucus, NJ 07094 Phone: (201) 968-0808

e-mail: info@hackensackriverkeeper.org

Hackensack Riverkeeper, Inc.

Captain Bill Sheehan 231 Main Street

Hackensack, NJ 07601-7304

Lyndhurst Fire Department

Dive Team Captain: Nicholas Haggerty

299 Delafield Ave Lyndhurst, NJ 07071 Phone: (201) 206-3299

Nereid Boat Club (NBC) Peter Willcox, President Phone: (212) 675-9506

e-mail: peter@downtowngroup.com

Passaic Boat Club (PBC)
Harvey Morginstin, President

Phone: (973) 338-6408

e-mail: Harvey.morginstin@gmail.com

Passaic River Coalition

Ella Filippone, Executive Director

330 Speedwell Ave Morristown, NJ 07960 Phone: (973) 532-9830

Passaic River Rowing Association (PRRA)

Ben Delisle, President Office: 201-761-0822 Cell: 201-232-2993 e-mail: DelisleB@jcnj.org

# 9 REFERENCES

CH2M HILL. 2012a. River Mile 10.9 Removal Action Design Work Plan, Lower Passaic River Study Area. August.

CH2M HILL. 2012. River Mile 10.9 Removal Action Basis of Design Report, Lower Passaic River Study Area. November.

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Foth et al, 2009. Lower Fox River Operable Unit 1, 2009 Remedial Action Summary Report.

Louis Berger Group, 2010. Implementation Hudson River PCBs Site EPA Phase 1 Evaluation Report: Chapter III Evaluation of the Productivity Standard. March.

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# ATTACHMENT A

RM 10.9 Task Summary

Task Description	Start Date	Finish Date
USEPA Draft Final Design Review	Feb 26, 2013	March 30, 2013
USEPA Final Design Approval	May 3, 2013	August 1, 2013
NJDEP Approves AUD Application	June 27, 2013	June 27, 2013
NJDEP Conditionally Approves Waterfront Development Permit	April 26, 2013	April 26, 2013
Baseline Water Quality Monitoring	May 31, 2013	July 26, 2013
Dredging	Aug 2, 2013	Sept 16, 2013
Stabilization	Aug 4, 2013	Sept 18, 2013
Transportation and Disposal	Aug 5, 2013	Sept 24, 2013
Capping	Oct 18, 2013	Dec 11, 2013
Demobilization	Dec 12, 2013	Dec 20, 2013
Submit Final Report	Apr 4, 2014	Apr 4, 2014